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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,854	11/08/1999	TIMOTHY R. PRYOR	P00891US3	5796

7590                    05/07/2002

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EXAMINER

ABDULSELAM, ABBAS L

ART UNIT	PAPER NUMBER
2674	9

DATE MAILED: 05/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. <b>09/435,854</b>	Applicant(s) <b>PRYOR</b>
	Examiner <b>Abbas Abdulselam</b>	Group Art Unit <b>2674</b>

Responsive to communication(s) filed on Apr 18, 2002.

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-22 and 27 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1-22 and 27 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

1. The final rejection is withdrawn and the following non-final action is issued.

### **Claim Rejections 35 U.S.C. 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-22 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Zimmerman et al. (USPN 4988981).

Regarding claims 1, 5, 21 and 27, Zimmerman teaches computer data entry and manipulation method and an apparatus (10) including a glove assembly (12), position sensing receiver assembly (20) around the screen (28). Zimmerman teaches that the glove assembly contains sensors detecting the flexing of the fingers and other gestures of the hand and also contains one or more ultrasonic transducers (17) for transmitting signals to receivers (20). Zimmerman teaches that the glove assembly sends signals and enters commands into the computer (16), and the command relates to the manipulation of virtual objects created by the computer and displayed on the display screen. Furthermore, Zimmerman teaches that movement by the glove assembly in plane parallel to the display screen produces the corresponding movement by the cursor. See Fig 3, lines 5-52 and FIG 1, col. 1, lines 10-16, col. 3, lines 53-64 and Fig 6. Therefore, an identical system is described as taught by Zimmerman.

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Regarding claims 2-4, Zimmerman teaches the use of a variety of devices for data entry and manipulations in computers. See col. 1, lines 10-11.

Regarding claim 6, Zimmerman teaches the distances measured between the glove and the three receivers in terms of coordinates (x, y, z) in rectangular coordinate system. See col. 6, lines 11-32.

Regarding claim 7, Zimmerman teaches a glove with sensors for detecting and flexing of finger joints and contacts on different parts of the hand. Col. 1, lines 42-45.

Regarding claims 8-9 and 11-15, see Fig 1 (20, 22, 24, 28).

Regarding claims 10 and 22, Zimmerman teaches the method of manipulation with respect to tools such a virtual steering wheel. See col. 1, lines 52-68.

Regarding claims 16-20, Zimmerman teaches that as the user of the system moves his hand in space, the position and orientation of the glove are continuously detected. See col. 8, lines 10-19, and Fig 6 (140).

### **Conclusion**

3. The prior art made of record and not relied upon is considered to applicant's disclosure.

The following arts are cited for further reference.

U.S. Pat No. 6,222,523 to Harvill

U.S. Pat No. 4,925,189 to Braeunig

U.S. Pat No. 4,375,674 to Thornton

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4. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abdulselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

**Any response to this action should be mailed to:**

Commissioner of patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314**

Hand delivered responses should be brought to crustal park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is **(703) 306-0377**.

Abbas Abdulselam

Examiner

Art Unit 2674

  
RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600